

Attention: Harold Fox

**From : Chih-Min Kam
Patent Examiner**

Fax No: (202)429-3902

Total pages: 4

**Messages: Proposed Examiner's Amendment for 09/811,824
(Docket No. 14952.0282/MIT)**

Proposed Examiner's Amendments to the Claims:

Please cancel claim 27 and 75.

Claims 21-25, 28, 59, 69, 70, 73, 74 and 76 have been amended as follows:

21. (Currently amended) A composition comprising:
 - a semiconductor nanocrystal,
 - a linking group which has a distal end and a proximal end, the distal end being bound to an outer surface of the semiconductor nanocrystal and the proximal end [including] consisting essentially of a first charged or ionizable moiety, wherein
 - the distal end [includes] consists essentially of S, N, P, O, or O=P;
 - [the proximal end includes] the first charged or ionizable moiety is selected from the group consisting of a hydroxide, an alkoxide, a carboxylate, a sulfonate, a phosphate, a phosphonate[, or] and a quaternary ammonium; and
 - the distal and proximal ends are connected by a spacer, and
 - a fusion protein [including] comprising a second charged or ionizable moiety, wherein the first and second charged or ionizable moieties electrostatically associate the semiconductor nanocrystal with the fusion protein to form an ionic conjugate.
22. (Currently amended) The composition of claim 21, wherein the spacer is selected from [a bond,] a branched or unbranched C2-C100 alkylene, a branched or unbranched C2-C100 alkenylene, a branched or unbranched C2-C100 heteroalkenylene, cycloalkyl, cycloalkenyl, cycloalkynyl, heterocyclic, aryl, and heteroaryl.
23. (Currently amended) The composition of claim 21, wherein the semiconductor nanocrystal [includes] comprises a first semiconductor material, and wherein the first semiconductor material [being] is a Group II-VI compound.
24. (Currently amended) The composition of claim 21, wherein the semiconductor nanocrystal further [comprises] binds to a plurality of linking groups each independently [including] comprising a third charged or ionizable moiety.

Art Unit: 1653

25. (Currently amended) The composition of claim 24 further comprising a plurality of macromolecules, each of the macromolecules [including] comprising a fourth charged or ionizable moiety, wherein the plurality of macromolecules are associated with the semiconductor nanocrystal via electrostatic interaction with the plurality of semiconductor nanocrystal linking groups.

28. (Currently amended) The composition of claim 21, wherein the second charged or ionizable [group includes] moiety is selected from the group consisting of [an] a hydroxide, an alkoxide, a carboxylate, a sulfonate, a phosphate, a phosphonate[, or] and a quaternary ammonium.

59. (Currently amended) A method of forming an ionic conjugate, comprising:
providing a semiconductor nanocrystal [including] with a linking group having a distal end and a proximal end, wherein the distal end [being] is bound to an outer surface of the semiconductor nanocrystal, and the proximal end [including] consisting essentially of a first charged or ionizable moiety, wherein the distal end [includes] consisting essentially of S, N, P, O, or O=P, [the proximal end includes] the first charged or ionizable moiety is selected from the group consisting of a hydroxide, an alkoxide, a carboxylate, a sulfonate, a phosphate, a phosphonate[, or] and a quaternary ammonium, and the distal and proximal ends are connected by a spacer; and

contacting a fusion protein having a second charged or ionizable moiety with the semiconductor nanocrystal, wherein the first and second charged or ionizable moieties electrostatically associate the semiconductor nanocrystal with the fusion protein to form an ionic conjugate.

69. (Currently amended) The method of claim 59, wherein the spacer is selected from [a bond,] a branched or unbranched C2-C100 alkylene, a branched or unbranched C2-C100 alkenylene, a branched or unbranched C2-C100 heteroalkenylene, cycloalkyl, cycloalkenyl, cycloalkynyl, heterocyclic, aryl, and heteroaryl.

Art Unit: 1653

70. (Currently amended) The method of claim 59, wherein the semiconductor nanocrystal [includes] comprises a first semiconductor material, wherein the first semiconductor material [being] is a Group II-VI compound.

73. (Currently amended) The method of claim 59, wherein the semiconductor nanocrystal further [comprises] binds to a plurality of linking groups each independently [including] comprising a third charged or ionizable moiety.

74. (Currently amended) The method of claim 73, further comprising a plurality of macromolecules, each of the macromolecules [including] comprising a fourth charged or ionizable moiety, wherein the plurality of macromolecules are associated with the semiconductor nanocrystal via electrostatic interaction with the plurality of linking groups.

76. (Currently amended) The method of claim 59, wherein the second charged or ionizable [group includes] moiety is selected from the group consisting of [an] a hydroxide, an alkoxide, a carboxylate, a sulfonate, a phosphate, a phosphonate[, or] and a quaternary ammonium.